

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Original) An adhesive sheet, comprising a polymer component,
the breaking strength of the adhesive sheet in a B-stage state being from 0.1 to 10 MPa at 25°C, and the breaking elongation thereof being from 1 to 40% at 25°C.
2. (Original) An adhesive sheet, comprising a polymer component,
the elastic modulus of the adhesive sheet in a B-stage state being from 1 to 3000 MPa in measurement of the dynamic viscoelasticity at 25°C and 10 Hz, and the elastic modulus thereof being from 4000 to 20000 MPa in measurement of the dynamic viscoelasticity at 25°C and 900 Hz.
3. (Original) An adhesive sheet, comprising a polymer component,
the elastic modulus of the adhesive sheet in a B-stage state being from 1 to 3000 MPa in measurement of the dynamic viscoelasticity at 25°C and 10 Hz, and the elastic modulus thereof being from 4000 to 20000 MPa in measurement of the dynamic viscoelasticity at -20°C and 10 Hz.
4. (Currently amended) The adhesive sheet according to claim 2-~~or~~3,
comprising the polymer component, and

the elastic modulus of the adhesive sheet in a B-stage state being from 0.1 to 20 MPa in measurement of the dynamic viscoelasticity at 60°C and 10 Hz.

5. (Currently amended) The adhesive sheet according to claim~~any one of claims 2 to 4~~, comprising the polymer component,

the breaking strength of the adhesive sheet in a B-stage state being from 0.1 to 10 MPa at 25°C, and the breaking elongation thereof being from 1 to 40% at 25°C.

6. (Currently amended) The adhesive sheet according to claim~~any one of claims 1 to 5~~, wherein the polymer component has a glass transition temperature of -30 to 50°C, and a weight-average molecular weight of 50000 to 1000000.

7. (Original) The adhesive sheet according to claim 6, wherein the polymer component, which has a glass transition temperature of -30 to 50°C and a weight-average molecular weight of 50000 to 1000000, is contained in an amount of 50% or less of the total weight of the adhesive sheet from which the weight of a filler is removed.

8. (Original) The adhesive sheet according to claim 7, further comprising a thermosetting component.

9. (Currently amended) The adhesive sheet according to claim 7-~~or 8~~, further comprising 5 to 70% by weight of the filler.

10. (Currently amended) The adhesive sheet according to claim~~any one of claims 1 to 9~~, wherein the content of remaining volatile matters is from 0.01 to 3% by weight.

11. (Currently amended) The adhesive sheet according to claim~~any one of claims 1 to 10~~, which has a film thickness of 1 to 250 μm .

12. (Currently amended) A dicing tape integrated type adhesive sheet formed by lamination of the adhesive sheet according to claim~~any one of claims 1 to 11~~ and a dicing tape.

13. (Currently amended) A method of producing a semiconductor device, comprising:

- I) the step of sticking the adhesive sheet according to claim~~any one of claims 1 to 11~~ onto a semiconductor wafer,
- II) the step of rendering the semiconductor wafer permissible to be cut,
- III) the step of sticking a dicing tape onto the adhesive sheet in order of I-II-III, II-I-III, or I-III-II, and further comprising:
 - IV) the step of cutting the semiconductor wafer and the adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and
 - V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

14. (Original) A method of producing a semiconductor device, comprising:
- I') the step of sticking the dicing tape integrated type adhesive sheet according to claim 12 onto a semiconductor wafer, and
 - II) the step of rendering the semiconductor wafer permissible to be cut in order of I'-II or II-I', and further comprising:
 - IV) the step of cutting the semiconductor wafer and the adhesive sheet of the dicing tape integrated type adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and
 - V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

15. (Currently amended) The method of producing a semiconductor device according to claim 13 ~~or~~ 14, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.

16. (New) The adhesive sheet according to claim 3, comprising the polymer component, and

the elastic modulus of the adhesive sheet in a B-stage state being from 0.1 to 20 MPa in measurement of the dynamic viscoelasticity at 60°C and 10 Hz.

17. (New) The adhesive sheet according to claim 3, comprising the polymer component,

the breaking strength of the adhesive sheet in a B-stage state being from 0.1 to 10 MPa at 25°C, and the breaking elongation thereof being from 1 to 40% at 25°C.

18. (New) The adhesive sheet according to claim 2, wherein the polymer component has a glass transition temperature of -30 to 50°C, and a weight-average molecular weight of 50000 to 1000000.

19. (New) The adhesive sheet according to claim 18, wherein the polymer component, which has a glass transition temperature of -30 to 50°C and a weight-average molecular weight of 50000 to 1000000, is contained in an amount of 50% or less of the total weight of the adhesive sheet from which the weight of a filler is removed.

20. (New) The adhesive sheet according to claim 19, further comprising a thermosetting component.

21. (New) The adhesive sheet according to claim 20, further comprising 5 to 70% by weight of the filler.

22. (New) The adhesive sheet according to claim 3, wherein the polymer component has a glass transition temperature of -30 to 50°C, and a weight-average molecular weight of 50000 to 1000000.

23. (New) The adhesive sheet according to claim 22, wherein the polymer component, which has a glass transition temperature of -30 to 50°C and a weight-average molecular weight of 50000 to 1000000, is contained in an amount of 50% or less of the total weight of the adhesive sheet from which the weight of a filler is removed.

24. (New) The adhesive sheet according to claim 23, further comprising a thermosetting component.

25. (New) The adhesive sheet according to claim 24, further comprising 5 to 70% by weight of the filler.

26. (New) The adhesive sheet according to claim 2, wherein the content of remaining volatile matters is from 0.01 to 3% by weight.

27. (New) The adhesive sheet according to claim 3, wherein the content of remaining volatile matters is from 0.01 to 3% by weight.

28. (New) The adhesive sheet according to claim 2, which has a film thickness of 1 to 250 μm .

29. (New) The adhesive sheet according to claim 3, which has a film thickness of 1 to 250 μm .

30. (New) A dicing tape integrated type adhesive sheet formed by lamination of the adhesive sheet according to claim 2 and a dicing tape.

31. (New) A dicing tape integrated type adhesive sheet formed by lamination of the adhesive sheet according to claim 3 and a dicing tape.

32. (New) A method of producing a semiconductor device, comprising:

- I) the step of sticking the adhesive sheet according to claim 2 onto a semiconductor wafer,
- II) the step of rendering the semiconductor wafer permissible to be cut,
- III) the step of sticking a dicing tape onto the adhesive sheet in order of I-II-III, II-I-III, or I-III-II, and further comprising:
 - IV) the step of cutting the semiconductor wafer and the adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and
 - V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

33. (New) The method of producing a semiconductor device according to claim 32, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.

34. (New) A method of producing a semiconductor device, comprising:

- I) the step of sticking the adhesive sheet according to claim 3 onto a semiconductor wafer,
- II) the step of rendering the semiconductor wafer permissible to be cut,
- III) the step of sticking a dicing tape onto the adhesive sheet in order of I-II-III, II-I-III, or I-III-II, and further comprising:
- IV) the step of cutting the semiconductor wafer and the adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and
- V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

35. (New) The method of producing a semiconductor device according to claim 34, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.

36. (New) The method of producing a semiconductor device according to claim 14, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.

37. (New) A method of producing a semiconductor device, comprising:
- I') the step of sticking the dicing tape integrated type adhesive sheet according to claim 30 onto a semiconductor wafer, and
 - II) the step of rendering the semiconductor wafer permissible to be cut in order of I'-II or II-I', and further comprising:

IV) the step of cutting the semiconductor wafer and the adhesive sheet of the dicing tape integrated type adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and

V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

38. (New) The method of producing a semiconductor device according to claim 37, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.

39. (New) A method of producing a semiconductor device, comprising:

I') the step of sticking the dicing tape integrated type adhesive sheet according to claim 31 onto a semiconductor wafer, and

II) the step of rendering the semiconductor wafer permissible to be cut in order of I'-II or II-I', and further comprising:

IV) the step of cutting the semiconductor wafer and the adhesive sheet of the dicing tape integrated type adhesive sheet, thereby yielding adhesive-sheet-stuck semiconductor chips which are individual pieces, and

V) the step of bonding the adhesive-sheet-stuck semiconductor chips onto a semiconductor-chip-mounting support member.

40. (New) The method of producing a semiconductor device according to claim 39, wherein a method for rendering the semiconductor wafer permissible to be cut is half cut dicing or stealth dicing.